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Dated: 2/27/04

Signature:

*Barbara J. Miller*  
(Barbara J. Miller)

Docket No.: 00131-00350-US  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Ann S. Robinson et al.

Application No.: 10/673000

Confirmation No.: #9773

Filed: September 26, 2003

Art Unit: N/A

For: USE OF HYDROSTATIC PRESSURE TO  
INHIBIT AND REVERSE PROTEIN  
AGGREGATION AND FACILITATE  
PROTEIN REFOLDING

Examiner: Not Yet Assigned

**INFORMATION DISCLOSURE STATEMENT (IDS)**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed before the mailing date of a first Office Action on the merits as far as is known to the undersigned (37 CFR 1.97(b)(3)).

Those patent(s) or publication(s) which are marked with a double asterisk (\*\*) next to the Cite No. in the attached form PTO/SB/08 are not supplied because they were previously cited by or submitted to the Office in a prior application number 09/695,762, filed October 25, 2000 and relied upon in this application for an earlier filing date under 35 U.S.C. 120.



Application No.: 10/673000

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In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith to our Deposit Account No. 03-2775, under Order No. 00131-00350-US.

Dated: February 27, 2004

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PTO/SB/08a/b (06-03)

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Substitute for form 1449A/B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	10/673000-Conf. #9773
				Filing Date	September 26, 2003
				First Named Inventor	Ann S. Robinson
				Art Unit	N/A
				Examiner Name	Not Yet Assigned
Sheet	1	of	2	Attorney Docket Number	00131-00350-US

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	AA**	US-6,489,450-B2	12-03-2002	Randolph et al.	
	AB**	US-5,288,462	02-22-1994	Carter et al.	

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	BA**	WO 02/062827-A2	08-15-2002	Randolph et al.	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		
	CA**	Anne S. Robinson, Grant Application Abstract, Career: Characterization, Inhibition, and Reversal of Protein Aggregation, June 1, 2000,		
	CB**	Anne S. Robinson, Grant Application Abstract, Powre: Molecular Determinants and Inhibition of Protein Aggregation, 10/1/1997		
	CC**	Anne S. Robinson, Oral Presentation, Engineering Approaches to Reversing Protein Aggregation, Mid-Atlantic Biochemical Engineering Consortium, April 7, 2000, University of Delaware, Abstract		
	CD**	Anne S. Robinson, Poster Presentation, The Role of Cysteines and Disulfide Bonds in the Protein Folding of P22 Tailspike, Mid-Atlantic Biochemical Engineering Consortium, April 7, 2000, University of Delaware, Abstract		
	CE**	Cleland, "Impact of Protein Folding on Biotechnology", Protein folding: <i>In vivo</i> and <i>in vitro</i> American Chemical Society (1993) 526: 1-21		
	CF**	DeBernardes-Clark et al., "Inclusion Bodies and Recovery of Proteins from the Aggregated State", Protein Refolding, American Chemical Society (1991) 470: 1-20		
	CG**	Foguel et al., "Characterization of a Partially Folded Monomer of the DNA-binding Domain of Human Papillomavirus E2 Protein Obtained at High Pressure", J Biol Chem (1998) 273(15): 9050-7		
	CH**	Gorovits et al., "High Hydrostatic Pressure Can Reverse Aggregatin of Protein Folding Intermediates and Facilitate Acquisition of Native Structure", Biochemistry (1998) 37(17): 6132-5		
	CI**	Jurkiewicz et al., "Inactivation of simian immunodeficiency virus by hydrostatic pressure", Proc. Natl. Acad. Sci. USA (1995) 92: 6935-7		
	CJ**	Robinson et al., "Hydrostatic and Osmotic Pressure as Tools to Study Macromolecular Recognition", Methods In Enzymol (1995) 259: 395-427		
	CK**	Shigehisa et al., "Effects of high hydrostatic pressure on characteristics of pork slurries and inactivation of microorganisms associated with meat and meat products" Int J Food Microiol (1991) 12(2-3): 207-15		

Examiner Signature	Date Considered
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Substitute for form 1449A/B/PTO				<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				Application Number	10/673000-Conf. #9773
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				Art Unit	N/A
				Examiner Name	Not Yet Assigned
Sheet	2	of	2	Attorney Docket Number	00131-00350-US

CL**	Silva <i>et al.</i> , "Effects of hydrostatic pressure on a membrane-enveloped virus: High immunogenicity of the pressure-inactivated virus", <i>J. Virol.</i> (1992) 66: 2111-7	
CM**	Silva <i>et al.</i> , "Pressure Stability of Proteins", <i>Annu. Rev. Phys. Chem.</i> (1993) 44: 89-113	
CN**	Silva <i>et al.</i> , "The use of hydrostatic pressure as a tool to study viruses and other macromolecular assemblages", <i>Current Opinion in Structural Biology</i> (1996) 6(2): 166-75	
CO**	Tauscher, "Pasteurization of food by hydrostatic high pressure: chemical aspects" <i>Z Lebensm Unters Forsch</i> (1995) 200(1): 3-13	
CP**	Gorovits <i>et al.</i> , "Rhodanese folding is controlled by the partitioning of its folding intermediates", <i>Biochimica et Biophysica Acta</i> 1382 (1998) 120-128	
CQ**	Webb <i>et al.</i> , "Stability of Subtilisin and Lysozyme under High Hydrostatic Pressure", <i>American Chemical Society and American Institute of Chemical Engineers</i> (2000) A-G	
CR**	Silva <i>et al.</i> , "Dissociation of a native dimer to a molten globule monomer. Effects of pressure and dilution on the association equilibrium of arc repressor", <i>J Mol Biol.</i> (1992) 223(2): 545-55	
CS**	Pontes <i>et al.</i> , "Pressure Inactivation of Animal Viruses: Potential Biotechnological Applications", <i>High Pressure Research in the Biosciences and Biotechnology</i> , K. Heremans (Ed.) Leuven University Press, Leuven, Belgium, 1997	
CT**	DeCordt <i>et al.</i> , "High pressure application in food preservation and processing", <i>Pressure Research in the Biosciences and Biotechnology</i> , K. Heremans (Ed.) Leuven University Press, Leuven, Belgium, 1997	
CU**	Smelt <i>et al.</i> , "Inactivation Kinetics of Microorganisms by High Pressure", <i>Pressure Research in the Biosciences and Biotechnology</i> , K. Heremans (Ed.) Leuven University Press, Leuven, Belgium, 1997	
CV**	Patterson <i>et al.</i> , "The Effect of High Hydrostatic Pressure Treatment on Micro-organisms in Foods", <i>Pressure Research in the Biosciences and Biotechnology</i> , K. Heremans (Ed.) Leuven University Press, Leuven, Belgium, 1997	
CW**	Foguel <i>et al.</i> , Hydrostatic Pressure Rescues Native Protein from Aggregates, <i>Biotechnology and Bioengineering</i> (1999) 63(5):552-558	
CX		
CY		

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature		Date Considered	
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